

What is claimed is:

1. A combustion gas burner enabling a multi-stage control comprises:

a main casing on the bottom surface of which an air blower is mounted so that air can
5 be supplied from the air blower through an air inlet formed in the lower portion of the main casing;

at least one tube-shaped burner mounted on the main casing in which fire hole units each having a number of fire holes formed at a predetermined distance from one another are disposed on the upper end surface of the main casing in order to burn gas and air which are
10 mixed and supplied to the tube-shaped burner;

at least one plate-shaped burner which is detachably disposed between the fire hole units formed on the upper end surface of the tube-shaped burner, and includes fire hole units having a number of fire holes;

a number of mixture supply tubes inserted in the tube-shaped burner and disposed at a
15 predetermined distance so that gas and air are mixed and the mixed gas and air is supplied to the tube-shaped burner and the plate-shaped burner;

a Venturi tube installed in front of the mixture supply tubes, mixing gas and air and playing a role of distributing an amount of flow of the mixed gas and air which is needed for independent combustion in each burner; and

20 a manifold connected to the Venturi tube and the mixture supply tubes, controlling an amount of gas and air.

2. The combustion gas burner enabling a multi-stage control of claim 1, wherein a number of premixed combustion gas burners including at least one tube-shaped burner and
25 at least one plate-shaped burner each having an identical burner output capacity which are disposed in parallel with one another in which a number of operating burners are varied according to a desired calorie.

3. The combustion gas burner enabling a multi-stage control of claim 1, wherein the manifold structure has no mixing chamber for mixing gas and air, in which flow paths through which gas and air flow independently, exist in the manifold and thus a mixture of gas and air is not produced in the manifold.

5

4. The combustion gas burner enabling a multi-stage control of claim 3, wherein the manifold has a structure that:

a body is protruded to form a predetermined space by working a general plate-shaped material;

10 a cover covering the front surface of the body is provided in front of the body, gas inlets supplying gas are provided on the body;

a number of nozzles formed of gas supply paths supplying gas are disposed on the body at a distance from each other; and

15 a number of air supply paths through which air passes are formed on the inner surface of the body which oppose the nozzles.

5. The combustion gas burner enabling a multi-stage control of claim 4, wherein the number of the gas inlets supplying gas which are provided on the body corresponds to the number of control stages, and the nozzles are separately partitioned to form respectively independent gas supply path in correspondence to the number of the multiple stages to control.

20